WHAT IS CLAIMED IS:

1.   Customer Premises Equipment (CPE) for operation with a Cable Modem Termination System (CMTS), the CMTS configured to output out-of-band (OOB) messages and downstream channel descriptor (DCD) messages

5   over a cable network, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, each DCD message being outputted over downstream channels and identifying at least a portion of the network addresses associated with the tunnels provided by the CMTS, the CPE comprising:

10   an embedded settop box (eSTB) configured to output a CPE identifier; and

an embedded cable modem (eCM) in communication with the eSTB, the eCM receiving the CPE identifier and configured to scan downstream channels of the CMTS for a matching DCD message, the matching DCD message having a

15   DCD message identifier that matches the CPE identifier, the eCM tuning to the one or more tunnels identified in the matching DCD message and delivering the OOB messages included in the tuned-to tunnels to the eSTB.

2.   The CPE of claim 1 wherein the eSTB remains tuned to the one or more tunnels identified in the matched CD message if an interrupt occurs to

20   the tuned to tunnels.

3.   The CPE of claim 2 wherein the eSTB remains tuned to the one or more tunnels identified in the matching DCD message as long as the matching DCD message is being received by the eCM.

4.   The CPE of claim 1 wherein the network addresses are media

25   access control (MAC) addresses.

5.   The CPE of claim 1 wherein the CPE identifier is a tunnel identifier associated with one of the network addresses in the DCD message.

6.   The CPE of claim 5 wherein the tunnel identifier is a conditional access tunnel identifier.

7.   The CPE of claim 6 wherein the conditional access tunnel identifier is associated with a conditional access identification of a vendor of the
5   CPE.

8.   A cable system for Out-Of-Band (OOB) messaging, the system comprising:

a Cable Modem Termination System (CMTS), the CMTS configured to output OOB messages and downstream channel descriptor (DCD) messages over
10   a cable network, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, each DCD message being outputted over downstream channels and identifying at least a portion of the network addresses associated with the tunnels provided by the CMTS; and

Customer Premises Equipment (CPE) having an embedded settop box
15   (eSTB) configured to output a CPE identifier and an embedded cable modem (eCM) in communication with the eSTB, the eCM receiving the CPE identifier and configured to scan downstream channels of the CMTS for a matching DCD message, the matching DCD message having a DCD message identifier that matches the CPE identifier, the eCM tuning to the tunnels specified in the matching DCD
20   message and delivering the OOB messages included in the tuned-to tunnels to the eSTB.

9.   The system of claim 8 wherein the eSTB remains tuned to the tunnels identified in the matching DCD message if an interrupt occurs to the tuned-to tunnels.

25   10.   The system of claim 9 wherein the eSTB remains tuned to the tunnels identified in the matching DCD message as long as the matching DCD message is being received by the eCM.

11.   The system of claim 8 wherein the network addresses are media access control (MAC) addresses.

12.   The system of claim 8 wherein the CPE identifier is a tunnel identifier associated with one of the network addresses in the DCD message.

13.   The system of claim 5 wherein the tunnel identifier is a conditional access tunnel identifier.

14.   The system of claim 6 wherein the conditional access tunnel identifier is associated with a conditional access identification of a vendor of the CPE.

15.   For use with Customer Premises Equipment (CPE) having an embedded settop box (eSTB) and an embedded cable modem (eCM), a method for Out-Of-Band (OOB) messaging, the method comprising:

receiving OOB messages and downstream channel descriptor (DCD) messages, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, the DCD messages being outputted over downstream channels and each including at least a portion of the network addresses associated with the tunnels provided by the CMTS;

scanning downstream channels of the CMTS with the eCM for DCD messages;

determining if one of the scanned channels includes a matching DCD message, the matching DCD messaging having a DCD message identifier that matches a CPE identifier; and

controlling the eCM to tune to the tunnels specified in the matching DCD message and to deliver the OOB messages included in the tuned-to tunnels to the eSTB.

16.   The method of claim 15 further comprising remaining tuned to the tunnels identified in the matching DCD message if an interrupt occurs to the tuned-to tunnels.

17.   The method of claim 15 further comprising remaining tuned to the tunnels identified in the matching DCD message as long as the matching DCD message is being received by the eCM.

18.   The method of claim 15 further comprising outputting the CPE identifier from the eSTB to the eCM such that the eCM determines whether the scanned channels include the matching DCD message.

19.   The method of claim 15 further comprising outputting the CPE identifier from a conditional access unit of the CPE to the eCM such that the eCM determines whether the scanned channels include the matching DCD message.

20.   The method of claim 15 wherein determining whether the scanned channels include the matching DCD message includes outputting the DCD message identifier included in the DCD messages of the scanned channels to the eSTB such that the eSTB determines whether the DCD message identifier matches the CPE identifier.

21.   The method of claim 15 wherein determining whether the scanned channels include the matching DCD message includes outputting the DCD message identifier included in the DCD messages of the scanned channels to a conditional access unit of the CPE such that the conditional access unit determines whether the DCD message identifier matches the CPE identifier.

22.   The method of claim 15 further comprising associating the network addresses with media access control (MAC) addresses.

23.   The method of claim 15 further comprising associating the CPE identifier with a tunnel identifier of one of the network addresses in the DCD message.

24.   The method of claim 23 further comprising associating the tunnel identifier with a conditional access tunnel identifier.

25.   The method of claim 24 further comprising associating the conditional access tunnel identifier with a conditional access identification of a vendor of the CPE.

26.   Customer Premises Equipment (CPE) for operation with a Cable Modem Termination System (CMTS), the CMTS configured to output out-of-band (OOB) messages and downstream channel descriptor (DCD) messages over a cable network, the OOB messages being outputted over one or more one-way data tunnels where each data tunnel is identified with a network address, each DCD message being outputted over downstream channels and identifying at least a portion of the network addresses associated with the tunnels provided by the CMTS, the CPE comprising:

an embedded cable modem (eCM) configured to scan downstream channels of the CMTS for DCD messages and to output the DCD message identifier included in the DCD message; and

an embedded settop box (eSTB) configured to determine whether the DCD message identifier matches with a CPE identifier such that the eSTB instructs the eCM to continue scanning of the DCD messages if the DCD message identifier fails to match the CPE identifier and to tune to the one or more tunnels identified by the network address in the DCD message if the DCD message identifier matches with the CPE identifier.

27.   The CPE of claim 26 wherein the eSTB includes a conditional access unit to determine whether the DCD message identifier matches with the CPE identifier.

28.   The CPE of claim 26 wherein the eSTB communicates with a conditional access unit to determine whether the DCD message identifier matches with the CPE identifier.